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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,200	10/06/2005	Mark Alan Gibson	FA1159- US PCT	8425

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Legal Patents
Wilmington, DE 19898

EXAMINER	
STOCK JR, GORDON J	
ART UNIT	PAPER NUMBER
2877	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,200	GIBSON ET AL.	
	Examiner	Art Unit	
	Gordon J. Stock	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 October 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings and Specification

1. The specification is objected to for the following: having Figures (Formulas 1-3) in the body of the specification. The Drawings must be separate from the specification, the description. See MPEP 1825 (specifically, page 1800-42, column 1).

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the 'spectrophotometer and computer' of claim 11; 'the dispenser' of claim 13; and 'the mixer' of claim 14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. In addition, see MPEP 1825 (specifically, page 1800-42, column 1)

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The abstract of the disclosure is objected to because the abstract exceeds 150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. **Claim 17** is objected to for the following: 'the portable computer usable storage medium of claim 8' lacks antecedent basis. Examiner has interpreted **claim 17** as depending from claim **16**. Correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claims 1, 6-9, 20, 24, and 25** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1, 6-9, 20, 24, 25 are directed to a judicial exception; as such, pursuant to the Interim Guidelines on Patent Eligible Subject Matter (MPEP 2106), the claims must have either physical transformation and/or a useful, concrete and tangible result. The claims fail to include transformation from one physical state to another. Although, the claims appear useful and concrete, there does not appear to be a tangible result claimed. Merely 'selecting an optimal viable combination'(the selecting step is an abstract idea without a tangible result of **claims 1 and 20**); and 'sequentially measuring' (the measuring step is an abstract idea without a tangible result of **claims 8-9**) would not appear to be sufficient to constitute a tangible result, since the outcome of the selecting/measuring step has not been used in a disclosed practical application

nor made available in such a manner that its usefulness in a disclosed practical application can be realized. As such, the subject matter of the claims is not patent eligible. **Claims 6, 7, 24, 25** are rejected for depending upon a rejected base claim; wherein **claims 6, 7, 24, 25** further limiting of the parent claim still does not constitute a tangible result.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1-7 and 10-14** are rejected under 35 U.S.C. 102(b) as being anticipated by **Falcoff (US 4,403,866).**

As for **claims 1 and 11**, Falcoff in a color matching method and system discloses the following: measuring reflectances of a target portion of a target coating at a set of preset wavelengths with a spectrophotometer of a coating characterizing device to plot a target spectral curve of said target portion (col. 3, lines 5-30 with tristimulus values demonstrating reflectances measured; col. 4, lines 50-65); calculating target color values of said target portion from said target spectral curve of said target portion (col. 3, lines 5-30; col. 4, lines 50-67); selecting one or more preliminary colorant combinations from a stored list of known colorants in accordance with a combinatorial selection criteria to match with said target color values and determining concentration of each said known colorant in each of said preliminary colorant combination in accordance with color matching criteria wherein said concentration of each said known colorant is optimized for optimal match of color values of each of said preliminary colorant combinations

with said target color values and balancing said preliminary colorant combinations to allow for the presence of non-colorant components in said matched coating composition to generate one or more viable combinations optimized in accordance with mixing and regulatory criteria developed for said specified end-use and selecting an optimal viable combination from said viable combinations in accordance with an acceptability equation for said specified end-use, said optimal viable combination having an optimal acceptability value for said specified end-use wherein said known colorants and non-colorant components when mixed in accordance with said optimal viable combination produce said matched coating composition that when applied as a matched coating visually matches the appearance of said target coating (col. 5, lines 1-35 and lines 55-67); the device comprises a programmable computer thereby having computer code with spectrophotometer (Fig. 1: 1 and 19).

As for **claims 2 and 12**, Falcoff discloses everything as above (see **claims 1 and 11**). In addition, Falcoff discloses displaying on a screen of a monitor said optimal viable combination (Fig. 1: 1; evidenced by display of information: col. 6, lines 20-36 and 45-50).

As for **claims 3 and 13**, Falcoff discloses everything as above (see **claims 1 and 11**). In addition, Falcoff discloses mixing said components of said optimal viable combination to produce said matched coating composition; wherein, a signal is generated to dispense said components for making a desired amount of said matched coating composition; a dispenser; generating a signal upon completion of making said desired amount of said matched coating composition and to stop dispensing into mixing vessel (Fig. 1: formula input with electrical coupling of computer to 7-12 and P1-P6; col. 5, lines 1-27).

As for **claim 4**, Falcoff discloses everything as above (see **claim 1**). In addition, Falcoff

discloses applying said matched coating composition over a substrate to produce said coating that visually matches the appearance of said target coating (col. 8, lines 20-30).

As for **claim 5**, Falcoff discloses everything as above (see **claim 4**). In addition, Falcoff discloses the substrate is an automotive body (col. 5, lines 44-46).

As for **claim 6**, Falcoff discloses everything as above (see **claim 1**). In addition, he discloses refinish automotive paint (col. 5, lines 50-55).

As for **claim 7**, Falcoff discloses everything as above (see **claim 1**). In addition, he discloses combinations of a plurality of colorants (Fig. 1: 10-12) and that there may be 5 paint formulas (col. 5, lines 65-67).

As for **claim 10**, Falcoff discloses everything as above (see **claim 1**). In addition, he discloses a matched coating composition (col. 7, lines 64-67; col. 8, lines 1-25).

9. **Claims 20, 21, and 23** are rejected under 35 U.S.C. 102(b) as being anticipated by **Cheetam (US 5,668,633).**

As for **claims 20, 21, and 23,** Cheetam in a method and system for formulating a color match discloses the following: measuring reflectances of a target portion of a target portion, standard, of a target substrate at a set of preset wavelengths with a spectrophotometer of a coating characterizing device to plot a target spectral curve of said target portion (col. 3, lines 15-30; col. 4, lines 25-40 and lines 55-65); calculating target color values of said target portion from said target spectral curve of said target portion (col. 4, lines 1-15); selecting one or more preliminary colorant combinations from a stored list of known colorants in accordance with a combinatorial selection criteria to match with said target color values (col. 4, lines 60-67; col. 5, lines 1-15); determining concentrations of each said known colorant in each of said preliminary

colorant combinations in accordance with color matching criteria to generate one or more intermediate colorant combinations of said known colorants wherein each of said intermediate colorant combinations is optimized for optimal color match with said target color values (col. 5, lines 20-40); balancing said intermediate colorant combinations to allow for the presence of non-colorant compounds in said matched coating composition to generate one or more viable combinations of said known colorants, wherein each of said viable combinations is optimized in accordance with mixing and regulatory practices developed for said specified end-use (col. 5, lines 45-67; col. 6, lines 1-20 with loadings demonstrating noncolorants for different pigments and hues are derived from particular dilution of colorants); selecting an optimal viable combination from said viable combinations in accordance with an acceptability equation for said specified end-sue, said optimal viable combination having an optimal acceptability value for said specified end-use wherein components in said optimal viable combination when mixed produce said matched resin that when formed as a matched substrate visually matches the appearance of said target substrate (col. 6, lines 1-25); mixing said components in said optimal viable combination with a resin to produce said matched resin; and processing said matched resin into said matched substrate (col. 5, lines 35-45 with col. 6, lines 1-20); a matched resin is produced (col. 5, lines 35-45).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. **Claims 8, 9, 15, 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Falcoff (US 4,403,866)** in view of **Corrigan (US 6,522,977)** and **Kettler (US 5,929,998)** and **Steenhoek (US 4,917,495).**

As for **claims 8, 9, 15, and 18** Falcoff discloses everything as above (see **claims 1 and 11**). He is silent about using multiple angles with his spectrophotometer nor the transportability of the device. However, Corrigan, Kettler, and Steenhoek all teach that color measurements are made at multiple angles with aspecular angles and that their systems are portable (Corrigan: column 6, lines 24-60; Kettler: column 5, lines 10-35; Steenhoek: Figure 1 and column 5, lines 30-60). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to have the method and device provide multiple aspecular angles of measurement in order to derive color measurements from reflectance values, for colorimetric values are obtained by a plurality of angles of measurement. In addition, it would be obvious to one of ordinary skill in the art at the time the invention was made to have the system be portable in order to facilitate quick measurements on a variety of test surfaces such as horizontal and vertical surfaces on automobile bodies.

13. **Claims 16-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Falcoff (US 4,403,866)** in view of **Corrigan (US 6,522,977)**

As for **claims 16-17**, Falcoff teaches **claim 1** (see above) and a programmed computer (column 5, lines 65-67). He is silent concerning portable computer storage medium such as CD-ROM. However, Corrigan in a color matching device teaches the use of several portable storage media such as CD-ROM, DVD ROM magnetic tape (col. 6, lines 55-60). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to have the system comprise portable computer usable storage medium such as CD-ROM in order to temporarily or permanently record data in order for it to be read later. **Claim 17** has been interpreted as depending from claim 16.

14. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Falcoff (US 4,403,866)** in view of **Milosevic (US 4,853,542).**

As for **claim 19**, Falcoff discloses everything as above (see **claim 11**). He is silent concerning a spherical spectrophotometer. However, Milosevic teaches in a spectrophotometer having a spherical configuration to increase signal to noise (column 1, lines 65-67; column 2, lines 1-20). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to have the spectrophotometer be spherical in order to increase the signal to noise ratio of the system.

15. **Claims 22, 24, and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Cheetam (US 5,668,633).**

As for **claims 22, 24, 25** Cheetam discloses everything as above (see **claim 20**). He is silent concerning the particular type of molding process (column 5, lines 38-40), the particular

substrate and particular matched substrate but he discloses that the substrates may be plastic, paper, or cloth (column 2, lines 55-60). Examiner takes Official Notice that Extrusion, thermoforming, injection molding, blow and rotational molding are well known processes of manipulating resins into forms. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to have the resin processed through extrusion, thermoforming, or type of molding in order to form it into a particular shape such as a plaque or chip. And it would be obvious to one of ordinary skill in the art at the time the invention was made that a matched substrate such as a dashboard or interior door panels or bumper guard and that a target substrate such as upholstery or an autobody were used for substrates made of plastic such as dashboard, door panels, bumper guards, and autobody are used in the matching process as well as cloth substrates such as upholsteries.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent 6,957,672 to Taylor et al.

Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice. Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made by the Board of Patent Appeals and Interferences. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement

during examination, then the object of the well known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-known statement in the **next reply** after the Office action in which the well known statement was made.

Fax/Telephone Numbers

If the applicant wishes to send a fax dealing with either a proposed amendment or a discussion with a phone interview, then the fax should:

1) Contain either a statement "DRAFT" or "PROPOSED AMENDMENT" on the fax cover sheet; and

2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax machine located in Crystal Plaza 4. The form of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is: **(571) 273-8300**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon J. Stock whose telephone number is (571) 272-2431. The examiner can normally be reached on Monday-Friday, 10:00 a.m. - 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr., can be reached at 571-272-2800 ext 77.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private Pair system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gs
January 7, 2007

Layla Lauchman
Primary Examiner
Art Unit 2877